

Sub Spec  
Approved for Entry  
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**SUBSTITUTE SPECIFICATION**

**CROSS-REFERENCE**

**[0001]** This non-provisional application claims the benefit of German Application Number 102 47 646.2-23, filed in Germany on October 11, 2002, which disclosure is hereby incorporated herein.

**BACKGROUND**

**[0002]** The present disclosure relates to a centrifuge, particularly a separator with a vertical axis of rotation and having a centrifugal drum. The centrifuge is equipped with a feeding tube for material to be centrifuged as well as with outlet nozzles, and an emergency off system being connected in front of the centrifugal drum. The present disclosure also relates to a method of implementing the emergency off function or system of the centrifuge.

**[0003]** A centrifuge including a separator with a vertical axis of rotation, and including a centrifugal drum having a feeding tube for material to be centrifuged, outlet nozzles and an emergency off system connected in front of the centrifugal drum, is known from German Patent Document DE 651 907 C.

**[0004]** German Patent Document DE 33 20 152, which is of a different type, shows a return valve with a ball arranged on a spring.

**[0005]** From German Patent Document DE 2 046 274 A, it is also known to close outlet openings of a centrifuge in the event of an emergency in the case of a major unbalanced mass.

**[0006]** For example, as a result of the occurrence of imbalances, it may be necessary to manually or automatically switch off a separator. Imbalances may be caused by a one-sided clogging of individual nozzles because the solids are no longer discharged in these areas. For example, a centrifuge is known which is constructed as a separator with a vertical axis of rotation and has a nozzle drum above which, for the implementation of an emergency-off system, an emergency off container is arranged which leads into the inlet of the separator and has the purpose of receiving a liquid, such as water.

**[0007]** In an emergency off case, the product feeding is stopped as a rule, and a switch-over takes place to water, in order to avoid losses.

**[0008]** Since the centrifugal drum may continue to rotate for minutes until it stops, after the activation of the emergency off function, liquid will be directed into the centrifugal drum until the latter comes to a stop, so that the negative effect of the unbalanced mass will not be